LOTUS T128

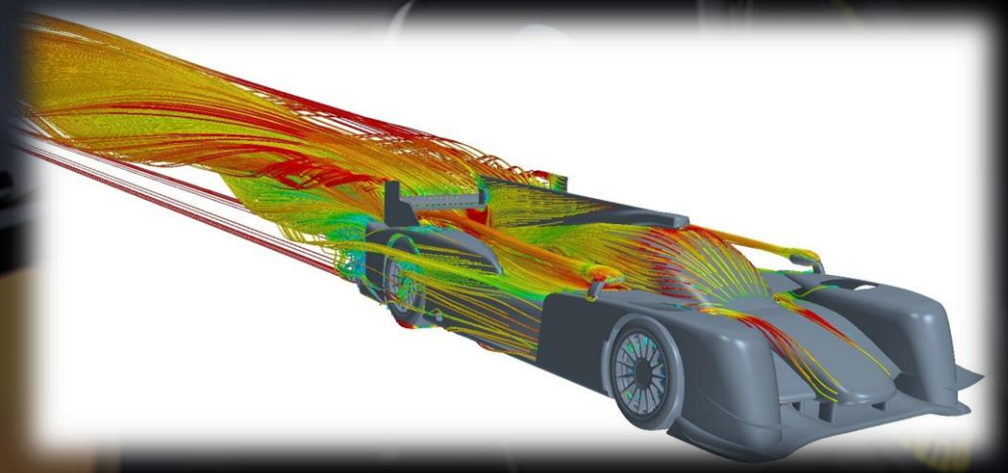
LMP2 customer‘s car

LOTUS T128

Passionated Engineering

Customers that are dedicated to high class motorsport vehicles will get the chance to enjoy an outstanding car in the Le Mans Prototype series:
*The **LMP2 LOTUS T128***.

The car has been developed by *ADESS AG*, a design and engineering office based in Munich. The engineers bring a lot of experience from Formula 1 and LMP1 sports cars.



The T128 is engineered according to the 2013 regulations and will be a state of the art car in terms of aerodynamics and monocoque design, employing the latest designs and technologies. The T128 will be able to accommodate the most normally-aspirated or turbocharged engines.

For teams that will be running the new Lotus LMP2 in the 2013 season for the first time, besides the support with spare parts at the race track, service packages for maintenance of spare parts will also be made available. Additionally, an engineering and simulation package will be offered to Lotus LMP2 customers.

LOTUS T128

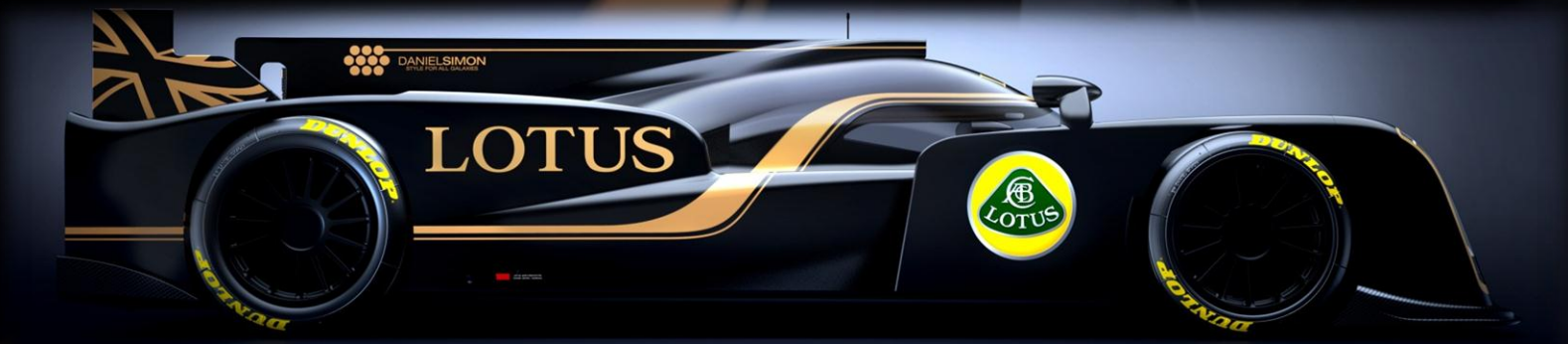
Car specification

Bodywork

- Bodywork panels made of lightweight carbon sandwich composites
- Quick release systems for nose, front diffuser, wheel arches assemblies, rear bodywork and rear wing
- Rear wing with twin profile and single central pillar

Aerodynamics

- Aerodynamic development with a 50% - scale wind tunnel model according to Formula 1 standards and complemented with high CFD computation resources
- Supply of competitive low-drag and high-downforce packages
- Adjustment possibilites for downforce, drag and aero balance levels
- Bodywork variations: diveplanes, rear wing gurney, rear wing angle, bodywork gurney
- Design optimization for low ride height sensitivity



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Car specification

Chassis

- Carbon composite monocoque
- Optimized lightweight design
- Achieving a high torsional, vertical and bending stiffness
- Driver cell developed according to the 2014 LMP1 regulations with improved safety, visibility and driver comfort
- Extensive mock-up program to verify ergonomics and driver accessibility

Fuel System

- *ATL* fuel system
- Electrical lift pumps and catch tank

Cooling and Engine Installation

- Steel fabricated engine subframe
- Carbon composite airbox
- Quick access to cooler front faces for clearing debris

Car specification

Steering and Pedal System

- Adjustable pedal platform
- Steering wheel quick release
- Adjustable steering wheel
- *Kayaba* electrical power assistance

Brake System

- *AP racing* ventilated carbon brake discs
- *AP racing* six-piston aluminum caliper
- In-cockpit brake balance quick adjuster system

Electronics

- Electrical boxes and looms mounted to the monocoque
- Light system with headlamps, rear brake and rain lights
- Indicators
- Windscreen heating and wiper
- Electrically adjustable rear view mirrors

Suspension

- Steel fabricated wishbones and pushrods
- Rocker activated torsion bar
- Adjustable damper
- Steel machined anti roll bar

Transmission

- *Xtrac* 1059-900-000A gearbox
- *Megaline* pneumatic paddle shift system
- Aluminum machined bellhousing
- Four different ratio solutions available, according to ACO regulations

Data logging

- Data logger
- Multifunction steering wheel with dashboard and sensors
- Additional loom with more than 20 sensors available on request

Development for success

Aerodynamics

- Usage of a F1 standard wind tunnel for testing
- Wind tunnel model scale: 50%
- Testing velocity: 50 m/s

- CFD: External aerodynamics simulations using *CD-Adapco StarCCM+*

Crash simulation

- Crash event simulation of safety related parts performed with the *HyperWorks* package
- Composite laminates modelling
- Design validation for the FIA safety regulations targets

Lap time simulation

- Parametric variations to define aero targets
- Modelling of the World Endurance Championship tracks
- Qualifying and race predictions

Customer services

Additional part supply

- Spare parts available during the FIA World Endurance Championship
- Supply of development parts according to ACO regulations
- Special part supply for the 24h of Le Mans
- Integrated supply chain from the development to the part on the track

Documentation

- Access to all necessary data for the track:
  - Aero catalog
  - Assembly manuals
  - Technical instructions
  - Guidelines
  - Spare parts

Engineering support

- On-track support provided by Lotus staff
- Design & engineering support during the whole season
- Tailored enginneering solutions

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Contact Details

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